ENTREPRENEURS' KNOWLEDGE ABOUT FINANCING ALTERNATIVES: IMPACT OF HUMAN AND SOCIAL CAPITAL

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ABSTRACT

This paper examines how entrepreneurs' human and social capital influence their knowledge of finance alternatives. For this purpose, we use survey data from 125 Belgian start-ups. Results demonstrate that entrepreneurs with an education in the field of business and entrepreneurs with experience in accounting or finance have a broader knowledge of finance alternatives. This is especially the case for the less commonly used finance alternatives. Having indirect ties to people with knowledge of finance also enhances the total knowledge of finance alternatives. However, more generic human capital, such as prior entrepreneurial experience and direct ties have no impact on entrepreneurs' knowledge of finance alternatives. Overall, this study demonstrates how not only supply side factors, but also demand side factors are constraining entrepreneurs in their search for finance.

INTRODUCTION

Finance is one of the necessary resources required for entrepreneurial ventures to form and subsequently develop (Gilbert et al., 2006). Finance decisions are hence key decisions made by entrepreneurs, which bear significant implications for the operations, risk of failure, performance and future growth potential of ventures (Michaelas et al., 1999; Cassar, 2004). Traditional finance theory resorts to the framework of perfect capital markets (Modigliani and Miller, 1958). This framework assumes that information is free and directly available to all entrepreneurs, which allows entrepreneurs to make comprehensive finance decisions with wealth maximization as their ultimate goal (Brealey and Myers, 2000). Moreover, in this perspective, the supply and demand for finance are in equilibrium, which implies that all value-creating projects will find sufficient finance. Contrary to this image portrayed in traditional finance theory, entrepreneurial ventures are often confronted with finance constraints and are not able to raise sufficient outside finance necessary to conduct all their value-creating investment projects (Himmelberg and Petersen, 1994; Hubbard, 1998). As a result, the growth of entrepreneurial ventures is often restricted by internal finance (Carpenter and Petersen, 2002).

Scholars studying finance constraints within entrepreneurial ventures have largely stressed *supply*-side arguments, thereby putting the decision-making process of investors in the foreground. Within this perspective, it is generally assumed that investors will be wary to finance ventures that face high levels of information asymmetries, as information asymmetries are precursors of agency problems. Hence, young ventures, which are thought to face high information asymmetries, due to their lack of a track record, are especially prone to finance constraints (Berger and Udell, 1998). The same argument applies to technology-based ventures, which need to conduct significant investments in intangible research and development projects that carry high levels of information asymmetries (Himmelberg and Petersen, 1994).

Next to information asymmetries and associated agency problems, scholars have focused on the role of transaction costs in explaining why investors may refrain from investing in entrepreneurial ventures (Berger and Udell, 1998; Cassar, 2004). A significant fraction of transaction costs are fixed, which creates economies of scale in issue size (Wald, 1999). This further limits the finance options that are available to small ventures. The scale required to issue equity or bonds on public capital markets, for example, excludes smaller ventures from this type of finance (Berger and Udell, 1998). Transaction costs also partially explain why venture capital investors are more reluctant to invest in start-ups, as typically smaller amounts are invested at start-up. The high search and selection costs faced by venture capital investors make small investments uneconomical (Lockett et al., 2002).

Research on *demand*-side arguments, which puts the decision-making process of entrepreneurs in the foreground, is more limited, but growing rapidly. Entrepreneurs are the driving force of important decisions and entrepreneurial characteristics may hence play an important role in explaining finance decisions (Cassar, 2004). Prior research demonstrates how many entrepreneurs have other goals besides value maximization. Entrepreneurs are often unwilling, for example, to raise outside equity because of fear of losing independence and control over their ventures (Manigart and Struyf, 1997; Sapienza et al., 2003). Moreover, the limited risk tolerance of entrepreneurs may preclude them from raising outside debt finance.

This article focuses on another entrepreneurial characteristic that may restrain the finance alternatives considered by entrepreneurs, namely their knowledge of these finance alternatives. Traditional finance theories implicitly assume that all entrepreneurs are fully aware of the existence of all potential finance alternatives and their respective advantages and disadvantages. However, recent studies indicate that entrepreneurs may also face finance constraints due to the existence of a *knowledge gap*. Van Auken (2001) showed that entrepreneurs of small technology-based ventures are likely to consider only a limited set of finance alternatives, due to their limited understanding of particular finance alternatives. The goal of this study is to expand this stream of research by explaining why some entrepreneurs have a higher knowledge of finance alternatives than others. More specifically, the impact of entrepreneurs' human and social capital on their knowledge of finance alternatives is explored. We propose and show that higher levels of specific human and social capital, i.e. more experience in finance or accounting, business education and knowledgeable social networks, lead to a deeper knowledge of finance alternatives. This might at least partly explain why entrepreneurs with high levels of human capital have less binding capital constraints when starting new businesses (Astebro and Bernhardt, 2005).

In the following section, we develop the theoretical arguments and hypotheses on the impact of human and social capital on an entrepreneur's knowledge of finance alternatives. Next, we discuss the empirical strategy used to test the hypotheses and describe in detail the data and variables employed in this study. Thereafter, we present our research findings, followed by concluding remarks and avenues for future research.

THEORETICAL DEVELOPMENT

While entrepreneurs are key decision makers shaping the entrepreneurial strategy within their ventures, the literature exploring the relationship between entrepreneurial characteristics and finance strategies in entrepreneurial ventures is only emerging. In this paper, we explore the role of entrepreneurs' human and social capital on their knowledge of finance alternatives.

Prior research demonstrates how human capital influences the ease by which entrepreneurs are able to overcome finance constraints through two distinct processes. First, human capital is positively related with the wealth of entrepreneurs. Hence, entrepreneurs with more human capital can use more of their personal funds to mitigate the finance constraints experienced by their ventures (Holtz-Eakin et al., 1994; Lindh and Ohlsson, 1996). Second, the human capital of entrepreneurs serves as a quality signal. Investors are more likely to contribute finance to start-ups that have information signals indicating high-quality resources and capabilities (Hallen, 2008). Taking both effects together, Astebro and Bernhardt (2005) found that ventures established by entrepreneurs with higher human capital generally have less binding capital constraints.

We argue that the human capital of entrepreneurs may not only be associated with their personal wealth and quality signals, but also with their knowledge of finance alternatives. Financial theory typically assumes that entrepreneurs are fully aware of all finance alternatives and their characteristics. An alternative information asymmetry problem, besides the one experienced by investors, is that not all entrepreneurs have an equally broad understanding of the finance options that are available. This indicates the existence of a *knowledge gap* (Gibson, 1992). Hence, entrepreneurs will be unaware of particular finance alternatives, which will limit the set of finance options considered by entrepreneurs (Van Auken, 2001). This may lead to suboptimal finance decisions and ultimately to finance constraints.

We propose that entrepreneurs with higher levels of human capital will experience a lower knowledge gap compared to their peers with lower levels of human capital. Human capital is typically represented by both education and previous experience (Colombo and Grilli, 2005). Entrepreneurs with higher levels of education have a higher probability of having studied business finance. Moreover, given their greater learning skills, they may also have a higher ability of learning about finance alternatives after their formal education. Hence, we expect a positive association between the level of education of entrepreneurs and their knowledge of finance alternatives. Furthermore, entrepreneurs with prior experience may also have a greater knowledge of finance alternatives. Entrepreneurs with prior start-up experience, for example, may have negotiated with different types of financiers to fund these start-ups. This leads to our first hypothesis:

H1: Entrepreneurs with higher levels of generic human capital have a greater knowledge of finance alternatives.

Researchers have stressed that not all human capital is equally important, however. Specific human capital is more valuable than generic human capital (Colombo and Grilli (2005). In the context of knowledge of finance alternatives, it is likely that entrepreneurs with a business education have higher knowledge compared to entrepreneurs with higher non-business education or compared to entrepreneurs with less education. Further, entrepreneurs with previous experience in accounting or finance are more likely to have a broader and deeper knowledge of finance alternatives. This leads to our second hypothesis:

H2: Entrepreneurs with higher levels of context specific human capital have a greater knowledge of finance alternatives.

Next to human capital, entrepreneurs can also learn about finance alternatives through their social networks. Direct ties provide an advantage to entrepreneurs who seek to obtain resources from investors through access to private information (Podolny, 1994). Prior research argues that direct ties between entrepreneurs and investors allow potential investors to improve their selection

(Shane and Cable, 2002). We claim that knowledgeable direct ties, established before start-up, may also reduce information problems experienced by entrepreneurs, as they enable information transfer to entrepreneurs about potential finance alternatives and investor characteristics. For example, entrepreneurs that have close relationships with bankers are able to discuss their specific financial needs with these ties, allowing them to gain a deeper understanding of finance alternatives. Direct ties are hence not only relevant for suppliers of finance, but they also reduce information asymmetries on the demand side of the market. This leads to our third hypothesis:

H3: Entrepreneurs with knowledgeable direct ties have a greater knowledge of finance alternatives.

Information is not only transferred through direct ties, but also through indirect ties. Indirect ties provide access to more information, at a higher speed and at a lower cost compared to direct ties (Burt, 1997; Nahapiet and Ghoshal, 1998). This explains why indirect ties reduce information asymmetries for potential investors and increase the likelihood that investors will contribute finance (Shane and Cable, 2002). We expect the same processes to reduce information asymmetries for entrepreneurs as well. Hence, the knowledge gap faced by entrepreneurs who can rely on more knowledgeable indirect ties is likely to be lower compared to their peers that lack these indirect ties. This leads to the final hypothesis:

H4: Entrepreneurs with knowledgeable indirect ties have a greater knowledge of finance alternatives.

RESEARCH METHOD

Data collection strategy

A random sample of 450 Flemish ventures founded between April 2008 and September 2008 was selected from the records of business incorporation as provided by the Flemish government. Given the homogeneous sample frame, non measured variance in terms of geographical location and age is reduced. Moreover, we limit survivorship and recollection biases by sampling ventures close to the period of formation (Cassar, 2004).

A questionnaire was developed and pre-tested in the autumn of 2008. Between mid November 2008 and mid January 2009, we telephoned all ventures in order to identify whether or not they fulfilled the conditions of our research. As the focus of the research is on real start-ups, ventures that were not independent and previously existing companies that continued under a new form were excluded. This resulted in a sample of 288 independent Flemish start-ups, which were mailed the questionnaire. Several possibilities to complete and return the questionnaires were offered, including e-mail, fax, post, and web-survey. After a first mailing, 68 usable questionnaires were received. A second mailing was sent to non-respondents three weeks after the first mailing. After further telephone and e-mail follow-ups, a total of 125 usable questionnaires were returned. This results in a response rate of 43%. The majority of respondents (84%) completed the questionnaire using the web-survey.

The questionnaire was organized in three main sections. The first section collected information about the venture (name, current function of the respondent, venture origin, number of founders, whether formal financial planning was conducted at start-up or not). The second section asked respondents to what degree they are familiar with finance alternatives (e.g. loans, supplier credit, leasing, venture capital, factoring and bonds among other finance alternatives). The third section

of the questionnaire asked respondents to list their prior experience, education and ties with finance experts.

Variables

Table 1 gives an overview of the dependent, independent and control variables used in the multivariate analyses.

Insert Table 1 about here

Dependent variables. A list of finance alternatives was composed based on the finance sources listed by Van Auken (2001), bootstrap finance strategies listed by Winborg and Landström (2001) and government programs specific for the Flemish region. The knowledge of the respondent with respect to the different finance alternatives was measured on a 6-point Likert scale, with 1=very limited knowledge to 5=very extensive knowledge, and 0 indicated the respondent was unaware of the existence of a particular finance alternative. The Likert scales were subsequently centered so that negative values represent below average knowledge of a finance alternative and positive values represent above average knowledge of finance alternatives.

A factor analysis was undertaken in order to identify groups of finance alternatives. Table 2 shows the results of the factor analysis. The Kaiser-Meyer-Olkin measure is 0.876 and Bartlett's Test 0.000, implying that a factor analysis is meaningful. Only factors with an eigenvalue larger than 1 are considered for further analysis. This procedure yields four factors, capturing 70 percent of the total variance after varimax rotation. The factors are broadly consistent with those identified by Van Auken (2001). Factor 1 captures the knowledge of the most commonly used finance alternatives, factor 2 captures the knowledge of advanced finance alternatives for the start-up phase, factor 3 captures the knowledge of advanced finance alternatives for the growth phase and factor 4 captures the knowledge of bootstrap finance methods. These four factors, together with the total knowledge of all finance alternatives, are used as dependent variables in the multivariate analyses.

Insert Table 2 about here

Independent variables. The key independent variables are correlates of the human and social capital of the founding entrepreneur. Following Colombo and Grilli (2005), a distinction is made between specific and generic human capital. Following variables proxy for specific human capital: business education (dummy variable equal to 1 if the entrepreneur has a degree in business and 0 otherwise) and number of years of work experience of the entrepreneur in accountancy or finance. Following variables proxy for generic human capital: higher education (dummy variable equal to 1 if the entrepreneur has a university-level or equivalent degree and 0 otherwise), number of years of work experience of the entrepreneur in the same industry, number of years of work experience of the entrepreneur in other industries, management experience (dummy variable equal to 1 if an entrepreneur previously held a management position in a company employing more than 100 people and zero otherwise), self-employment experience (dummy variable equal to 1 if entrepreneur has prior self-employment experience and 0 otherwise), start-up experience (dummy variable equal to 1 if entrepreneur has prior start-up experience and 0 otherwise).

The social capital variables are measured with multi-item five-point Likert scales ranging from 1=strongly disagree to 5=strongly agree. Each scale is calculated by adding together the values for the items that composed the scale and dividing by the number of items. The items are taken from Shane and Cable (2002) and adapted to our setting. The direct tie scale is composed of three questions about direct ties between the entrepreneur and finance experts. A finance expert is each individual with correct and reliable information about finance alternatives. The items are: "Prior to the company's start-up, I had a professional relationship with at least one finance expert"; "Prior to the company's start-up, at least one finance expert was someone with whom I had engaged in informal social activity (e.g., playing tennis, going to the movies)"; "Prior to the company's start-up, at least one finance expert was a personal friend" (Cronbach's alpha = 0.74). The indirect tie scale is composed of three questions on indirect ties between the entrepreneur and finance experts. The items are: "Someone whom I trust to discuss important confidential matters knew at least one finance expert"; "A third party whose judgement I trust can bring me in contact with a finance expert"; "Through my network of contacts, I could obtain information from a finance expert" (Cronbach's alpha = 0.78).

Control variables. As entrepreneurs with high growth ambitions may have better prepared their start-up and hence have acquired a better knowledge of finance alternatives, the expected growth rate is included as a control. This is measured as the target number of employees (in full time equivalents) and the natural logarithm of target sales as envisioned by the entrepreneur 5 years after start-up. The average employment target equals approximately 5 employees, with a maximum of 90 employees. In order to further control for preparation, a dummy variable whether or not the entrepreneur performed formal financial planning before start-up is included. In addition, the percentage of shares retained by the entrepreneurial team is controlled for. If other shareholders are involved in the company, then the knowledge base is likely to be broader. In order to account for the initial size of the company, the natural logarithm of the level of start-up capital is included. Finally, we control for industry effects. The industry dummy variable equals 1 if a venture operates within 'wholesale and retail' or 'professional, scientific and technical activities' and zero otherwise. Almost 60% of the start-ups are active in wholesale, retail trade and professional, scientific and technical activities. The other industries represent less than 10% of the sample. The correlations between the independent variables are not sufficiently large so as not to cause collinearity problems in multivariate regressions. A correlation matrix is not reported due to space limitations, but is available from the authors upon request.

RESULTS

The total knowledge about finance alternatives, the knowledge of common finance alternatives, advanced finance alternatives for the start-up phase, advanced finance alternatives for the growth phase and bootstrap finance methods are analyzed separately. Non-parametric Mann-Whitney tests (available from the authors upon request) show that entrepreneurs with previous experience in accounting or finance have a significantly ($p<0.01$) higher total knowledge and a higher advanced knowledge of finance alternatives for the start-up and the growth phase. They do not have a higher knowledge of bootstrap finance techniques. Other types of experience do not lead to higher knowledge. Entrepreneurs with either higher education or education in the field of business have a significantly ($p<0.01$) higher total knowledge and higher knowledge of all four factors. Entrepreneurs with direct ties to finance experts have a significantly ($p<0.05$) higher total knowledge and a higher knowledge of bootstrap finance and of advanced methods to finance the start-up or growth phase, but not of common finance alternatives. Bivariate analyses show no significant differences between entrepreneurs with and without indirect ties to financial experts.

The multivariate relationships between the independent and dependent variables are analyzed with Tobit regressions. The Tobit specification was utilized because the dependent variables examined were censored. Table 3 presents the results of the multivariate Tobit regressions. Panel A reports the models with the total knowledge of finance as dependent variable, Panel B reports the models with the knowledge of commonly used finance methods as dependent variable, panel C reports the models with the knowledge of advanced start-up finance methods, panel D reports the models with the knowledge of advanced growth finance methods and panel E reports the models with the knowledge of bootstrap finance as dependent variable. Four models are reported in each panel. Model (1) includes the control variables; the human capital variables are included in model (2); model (3) expands model (1) with social capital variables and model (4) is the full model, including control variables, human capital and social capital variables. While the control variable for method of data collection was included in all models, this variable was never significant and is not reported for the sake of brevity.

The Mc Fadden's pseudo R^2 in all panels shows that adding the independent variables improves the fit of the models; the full models have the highest fit. Hence, human and social capital variables are important in explaining an entrepreneur's knowledge of finance alternatives. The models explaining the total knowledge of finance alternatives have the highest explanatory power, while the models explaining the knowledge of advanced start-up finance alternatives have the lowest explanatory power. These are also the alternatives that are the least known by entrepreneurs. As the significance and the sign of the coefficients are consistent in the four models within a panel, the discussion of the results will focus on the full model (4).

Insert Table 3 about here

The coefficients of the control variables show that entrepreneurs with higher growth aspirations, as measured by their targeted number of employees and sales in five years time, have a significantly higher knowledge of overall finance alternatives (Panel A), which is mainly driven by their higher knowledge of bootstrap finance techniques (Panel E; $p<0.01$) and of common finance techniques (Panel B; $p<0.05$). Interestingly, entrepreneurs with higher growth aspirations do not have a higher knowledge of finance alternatives that are especially important for high growth companies, i.e. advanced finance methods for start-ups and for growth companies. A higher level of start-up capital is not associated with a higher knowledge of finance alternatives. Entrepreneurial teams, retaining higher percentages of the shares of their companies at start-up, have a significantly higher knowledge of bootstrap finance techniques ($p<0.01$).

Adding the human capital variables improves the fit of the models more than adding the social capital variables. Education and experience are hence the most important drivers of an entrepreneur's knowledge of finance alternatives. Entrepreneurs with higher education do not have a higher knowledge of finance alternatives in general, but they have a higher knowledge of advanced finance alternatives for growth companies ($p<0.05$). Specific business education leads to significantly higher knowledge of all finance alternatives ($p<0.01$). More specifically, business education leads to a higher knowledge of commonly used finance alternatives ($p<0.01$), of advanced finance alternatives for growth companies ($p<0.01$) and of bootstrap finance techniques ($p<0.05$), but not of advanced finance alternatives for start-ups.

Previous experience has a more mixed impact on the knowledge of finance alternatives. Experience in accounting or finance has a significant and positive impact on all dependent variables. Further, experience in other industries has a positive impact on the total knowledge of

finance alternatives ($p<0.05$), of commonly used finance alternatives ($p<0.01$) and on advanced finance alternatives for growth companies ($p<0.05$). Experience in the same industry has a significantly positive impact on the knowledge of advanced finance alternatives for growth companies ($p<0.01$). Unexpectedly, entrepreneurs with previous start-up experience have a lower knowledge of commonly used finance alternatives ($p<0.05$). Experience as a self-employed leads to a significantly higher knowledge of advanced start-up finance techniques ($p<0.05$). Overall management experience has no impact on an entrepreneur's knowledge of finance alternatives.

The results are broadly consistent with the predictions of hypotheses 1 and 2. More human capital leads to a higher knowledge of finance alternatives, but the impact of human capital depends on its specificity. More specific human capital, i.e. a business education or experience in accounting or finance, has a stronger positive impact on financial knowledge than more generic human capital. Generic human capital cannot be ignored, however, as higher (non-business) education and industry experience, either in the same or in another industry, are positively associated with the knowledge of some forms of finance.

The effect of entrepreneurs' social capital is weaker than the effect of their human capital. An entrepreneur having direct ties with finance experts has no effect on the entrepreneur's knowledge of finance alternatives at start-up, except for the commonly used finance alternatives ($p<0.05$). Indirect ties with finance experts enhance an entrepreneur's total knowledge of finance alternatives ($p<0.05$), but they have no statistically significant impact on the knowledge of specific finance techniques. The support for hypotheses 3 and 4 is hence weak.

DISCUSSION AND CONCLUSION

While it is widely acknowledged that financial resource acquisition is a key process in the start-up and growth of new businesses, our understanding of this process is largely rooted in economic theories emphasizing wealth maximization as an overarching goal, rational behavior of all actors involved and information asymmetries. Theories building on the existence of information asymmetries typically assume that (potential) investors are informationally constrained, which influences their selection and post-investment processes: investors select the ventures in which they invest. This paper highlights a second information asymmetry problem, namely the fact that entrepreneurs do not have full information of finance alternatives. This knowledge gap leads entrepreneurs to select these finance alternatives they are familiar with, potentially leading to suboptimal finance structures.

The main contribution of this paper lies in the finding that entrepreneurs with higher levels of specific human and social capital have lower knowledge gaps. Especially specific human capital, i.e. a business education or previous experience in accounting or finance, increases an entrepreneur's knowledge of finance alternatives. Generic human capital in the form of higher education or general experience has a more modest, but also positive impact. The impact of an entrepreneur's social capital at start-up is more limited, albeit positive. Overall, we contribute to a further socializing of the finance acquisition process in entrepreneurial ventures, by demonstrating the key role of entrepreneurial characteristics on finance decisions in start-ups.

We have shown that entrepreneurs' knowledge of finance alternatives in general is rather limited. Even the knowledge of commonly used finance methods and of widely applicable bootstrap finance methods is limited. More complex finance options, specifically targeted towards growth oriented ventures, are even less understood. The knowledge of finance methods targeted at start-ups is the least understood category. Moreover, the lack of knowledge on specific

government measures for start-ups is worrying, as these are specifically targeted towards the entrepreneurs represented in the sample. These findings are broadly consistent with Van Auken (2001) for US entrepreneurs.

A methodological strength of this study is the fact that all social and human capital variables are measured at start-up, hence eliminating survival and recall biases. It would be interesting to add a longitudinal dimension to the current research. This would allow understanding how the initial knowledge gap influences subsequent finance and growth processes. Is the knowledge gap of an entrepreneur at start-up a major hindrance in the development of the start-up, or is the entrepreneur able to overcome this liability through subsequent learning and experience? These are important avenues for future research.

The study suggests implications for policy makers and for entrepreneurs. The role of business education is highlighted. Strengthening life-long education for entrepreneurs on business in general and on financial matters in particular is warranted. Further, when new policy initiatives are developed, frequent and clear communication with the target group and their advisors is key. This study suggests that well-designed initiatives often fail to capture the attention of their target group.

Entrepreneurs should understand that finance is a key resource for their business; failure to understand the finance alternatives and their characteristics may seriously hamper the development of their ventures. Most entrepreneurs, however, have a limited knowledge of finance options, even if they have a broad business experience. They may enhance their understanding thereof through training. Further, they should understand that links to financial experts are valuable in reducing the knowledge gap. If they do not have direct links yet, they should actively seek to establish them. If they have links to experts, they should activate them and tap their knowledge.

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Table 1: Descriptive Statistics

	Abbreviation	N	Min	Max	Mean	Std.Dev.
DEPENDENT VARIABLES						
Total knowledge about finance alternatives	Total	125	-1.37	0.68	-0.47	0.40
Knowledge of common finance alternatives	Common	125	-1.42	1.00	-0.10	0.52
Knowledge of advanced finance alternatives for the start-up phase	Start-up	125	-1.50	1.00	-1.21	0.40
Knowledge of advanced finance alternatives for the growth phase	Growth	125	-1.50	0.70	-0.67	0.57
Knowledge of bootstrap finance methods	Bootstrap	125	-1.00	1.00	-0.07	0.41
CONTROL VARIABLES						
Targeted number of employees after 5 years	N°Empl	112	0	90	4.96	12.62
Ln (targeted sales after 5 years)	Sales	93	5.53	17.62	12.91	2.07
Financial planning (dummy)	FinPlan	124	0	1	0.93	
Percentage of shares retained by the entrepreneurial team	Share%	121	0	100	94.97	17.65
Ln (level of start-up capital)	StartCap	110	0.00	17.13	9.86	2.99
Method of data collection (dummy)	DataColl	125	0	1	0.84	
Industry (dummy)	Industry	121	0	1	0.60	
INDEPENDENT VARIABLES						
HUMAN CAPITAL						
Higher education (dummy)	HighEdu	121	0	1	0.72	
Business education (dummy)	BusiEdu	121	0	1	0.37	
Number of years of work experience gained by founders in the same industry	ExpSameInd	121	0	40	8.88	7.81
Number of years of work experience gained by founders in other industries	ExpOtherInd	121	0	20	6.46	6.74
Number of years of work experience gained by founders in the domain of accountancy or finance	ExpAcc&Finn	121	0	40	1.36	4.90
Founder with a prior management position in a large or medium company (i.e., number of employees greater than 100) (dummy)	MgtExp	121	0	1	0.21	
Founder with a previous self-employment experience (dummy)	ExpSelf-Empl	121	0	1	0.37	
Founder with previous start up experience (dummy)	ExpStart-up	121	0	1	0.31	
SOCIAL CAPITAL						
Direct ties	DirTies	120	-1	1	0.37	0.46
Indirect ties	IndirTies	121	-1	1	0.26	0.53

Table 2: Rotated Orthogonal Factor Analysis for Knowledge of Finance Alternatives

	Factor			
Knowledge of finance alternatives	Common	Start-up	Growth	Bootstrap
Loans	*0.874*	0.153	0.206	0.028
Credit lines	*0.811*	0.162	0.196	0.106
Supplier's credit	*0.693*	0.337	0.369	0.166
Leasing	*0.690*	0.351	0.107	0.104
Customer's credit	*0.597*	0.341	0.447	0.180
Friends and Family financing	*0.592*	0.254	0.289	0.072
Public Stock	0.176	*0.859*	0.215	0.076
Private stock	0.194	*0.81*	0.223	0.116
Bonds	0.294	*0.753*	0.058	0.143
Factoring	0.388	*0.598*	0.286	0.208
Venture capital	0.432	*0.586*	0.185	0.411
Joint utilization	0.070	0.189	*0.808*	0.004
Minimization accounts receivable	0.358	0.125	*0.778*	0.092
Minimization capital invested in inventory	0.339	0.18	*0.755*	0.089
Delaying payments	0.516	0.242	*0.630*	0.154
IWT-subsidy	0.169	-0.020	-0.009	*0.805*
Vinnof	-0.079	0.157	0.128	*0.803*
ARKimedes	0.124	0.212	0.028	*0.789*
Business Angels	0.311	0.441	0.232	*0.515*
Eigenvalue:	8.813	2.060	1.331	1.153
Percent variance explained	46.385	57.227	64.234	70.303

Table 3: Multivariate Tobit Regression Models

	Total				Common				Start-up				Growth				Bootstrap			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
Constant	-2.490 ***	-2.483 ***	-2.219 ***	-2.199 ***	-2.266 **	-2.339 ***	-1.671 *	-1.706 **	-3.278 **	-3.054 **	-2.811 *	-2.687 *	-2.346 **	-2.533 ***	-2.380 **	-2.264 **	-2.790 ***	-2.799 ***	-2.554 ***	-2.566 ***
Control variables																				
N°Empl	0.008 *	0.008 *	0.007 *	0.007 *	0.005	0.005	0.004	0.004	0.011	0.009	0.011	0.009	0.010 †	0.008	0.008	0.006	0.009 *	0.010 **	0.009 *	0.009 **
Sales	0.048 *	0.044 *	0.048 *	0.044 *	0.076 **	0.075 **	0.061 *	0.058 *	0.041	0.031	0.033	0.019	0.051	0.040	0.069 †	0.049 †	0.073 **	0.069 **	0.071 **	0.069 **
FinPlan	0.146	0.146	0.262 †	0.269 *	0.110	0.064	0.121	0.103	-0.091	0.044	-0.102	-0.023	0.162	0.117	0.476 *	0.375 †	0.171	0.165	0.253	0.273 †
Share%	0.010 *	0.010 **	0.007 †	0.007 †	0.007	0.008 †	0.003	0.003	0.014	0.011	0.010	0.008	0.007	0.007	0.004	0.002	0.015 **	0.016 ***	0.013 **	0.013 **
StartCap	0.012	-0.001	0.005	-0.011	0.043 *	0.023	0.037 †	0.015	-0.003	-0.035	-0.006	-0.032	0.012	-0.009	-0.001	-0.027	0.012	0.001	0.006	-0.008
Industry	0.096	0.050	0.032	-0.037	0.025	-0.067	-0.031	-0.171 †	0.130	0.053	0.105	0.037	0.080	-0.033	-0.024	-0.163	0.020	-0.025	-0.027	-0.094
Dependent variables																				
Human Capital																				
HighEdu		0.070		0.058		0.036		0.059		0.281		0.299		0.282 *		0.258 *		0.013		0.008
BusiEdu		0.187 *		0.199 **		0.268 *		0.304 **		0.236		0.222		0.479 ***		0.507 **		0.153 †		0.176 *
ExpSameInd		0.001		0.003		0.005		0.010		0.001		0.003		0.023 **		0.025 **		-0.004		-0.002
ExpOtherInd		0.006		0.010 *		0.015 *		0.018 **		0.000		0.001		0.011		0.018 *		0.007		0.011 †
ExpAcc&Finn		0.015 *		0.015 *		0.032 **		0.036 **		0.025 †		0.024 †		0.028 **		0.030 **		0.013 †		0.013 †
MgtExp		0.018		0.000		-0.031		-0.021		0.017		0.063		0.043		-0.033		0.072		0.042
ExpSelf-Empl		0.148		0.115		0.079		0.023		0.553 *		0.505 *		0.080		0.041		0.176		0.149
ExpStart-up		-0.152		-0.187 †		-0.257 †		-0.269 *		-0.339		-0.286		-0.067		-0.154		-0.191		-0.226 †
Social Capital																				0.112
DirTies			-0.014	0.057			0.157	0.293 *			-0.074	0.017			-0.193	0.105			0.073	0.112
IndirTies			0.233 *	0.203 *			0.159	0.134			0.271	0.171			0.387 *	0.219			0.104	0.098
Mc Fadden's Pseudo- R^2	0.328	0.583	0.470	0.787	0.178	0.370	0.230	0.487	0.040	0.131	0.056	0.145	0.071	0.312	0.130	0.393	0.312	0.442	0.346	0.502

Significance levels: ***<0.001; **<0.01; *<0.05; †<0.1